

**PACKAGE ID** - 000732IB38600 CADJOB

**KWIC TITLE** - A Simplified Thermohydrodynamic Model for  
Fluid Film Bearings

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**LIMITATION CODE** -UNL                   **AUDIENCE CODE** - UNL

**COMPLETION DATE** - 03/01/1994   **PUBLICATION DATE** - 03/01/1994

**DESCRIPTION** - CADJOB was constructed with the industrial designer in mind. The objective of the program is to assist the mechanical designer in selecting a journal bearing (single or multi-pad, tilting or fixed-pad, single or multi-slot inlet, isothermal or THD operation) that will satisfy, specific working conditions. CADJOB may also be used for instructional purposes, to provide the student with insight into the relative importance of the various bearing parameters.

**PACKAGE CONTENTS** - Media Directory; Software Abstract; Media Includes User's Manual, Executables, Sample Problems;

**SOURCE CODE INCLUDED?** - No

**MEDIA QUANTITY** - 2 3.5 Diskettes

**METHOD OF SOLUTION** - With graphics user interface, the designer selects, or lets the program select, the major design parameters of a journal bearing, corresponding to desired working conditions. The program then calculates the performance characteristics of the bearing. Calculations can be performed either in the isothermal or in the non-isothermal (i.e., thermodynamic or THD) mode.

**COMPUTER** - IBM PC 386

**OPERATING SYSTEMS** - DOS

**PROGRAMMING LANGUAGES** - FORTRAN

**SOURCE CODE AVAILABLE (Y/N)** - N

**HARDWARE REQS** - DOS system based computer with INTEL 386 microprocessor, with a hard disk and a 640K floppy-disk drive. 4 MB of RAM. Enhanced graphics adapter (EGA0 monitor. A Microsoft or IBM PS/2 equivalent mouse is recommended, but is not required.

**TIME REQUIREMENTS** - It can be as much as several thousand seconds on a 386 based machine.

**REFERENCES** - User's manual on diskette.

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**ABSTRACT STATUS** - Submitted August 1, 1994. Source code was not provided with this package. The executable runs, but caused the PC used for screening (an Everex 486/33e running MS-DOS version 6.22) to reboot. Released AS-IS 4/26/95.

**SUBJECT CLASS CODE** - T

**KEYWORDS** -

COMPUTER PROGRAM DOCUMENTATION  
C CODES  
COMPUTER-AIDED DESIGN  
THERMODYNAMICS  
BEARINGS

**EDB SUBJECT CATEGORIES** -

990200 420200

**SPONSOR** - DOE/CE

**PACKAGE TYPE** - AS - IS